

Work Order ID 149903

August 09, 2016 3:08:04 PM

149903*Undrill as per email attached*

Page 1

Item ID: D119-646-241

Accept

N900040100

Setup Start

NS1

Revision ID: URF 15-560

Stop

NS2

Item Name: Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH

Start Date: 8/9/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/31/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: *SH* Date: AUG 11 2016

Tooling:

Date:

Run Start

NR1

QC: _____ Date: _____ SPC (Y/N): _____

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3887-045	D								
IIN-D119-646	C								

101

0.00

101

QC

Quality Control

Memo

0.00

PULL FROM STOCK D119-646-241 B118472 X1

MASK AREA ACCORDING TO THE ATTACHED DIAGRAM

REMOVE PAINT IN THAT AREA

TOUCH UP ALODINE IF NEEDED

CLEAN AREA

DART		1270 ABERDEEN ST. HAWKESBURY ON CANADA K6A 1K7 TEL: 1-613-632-5200 www.dartspace.com	
PATENT	US #5735484 / CA #2222184 / EURO #0828655		
P/N	D119-646-241	CHG	CHG003
DESC	Replacement Skidtube STD	STC	SR02024SE
LOT	B118472	STC	
MODEL	Agusta A119/AW119MKII	STC	
TC APPROVAL # 09-89		MADE IN CANADA	
		D2729-4	

122

QC5- Inspect part completeness to step on W/O

0.00

122

QC

Quality Control

Memo

0.00

DAS

16

9-89

10/08/23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval 	
Description Work Order Deviation				Disposition					
								Completed By	
								Lead hand / Supervisor Approval Verification	
						QC / QA Coordinator Approval			

Root Cause				FAULT CATEGORY			
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date ☐	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified ☐	☐	Past Due	☐				

Work Order ID 149903

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Page 2

Item ID: D119-646-241 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: URF 15-560 Stop ***NS2***
Item Name: Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH
Start Date: 8/9/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 8/31/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	Identify as per dwg & Stock Location: <u>W/O 149174</u>	0.00				<u>1X</u>			<u>16/08/31</u>
260									
Packaging	Memo	0.00							
Packaging	ADD NEW RED LABELS								
	Location : FG084								
270	QC21- Final Inspection - Work Order Release	0.00							
270									
QC	Memo	0.02							
Quality Control									

DAS 36 9-89

DAS 21 9-89

AUG 31 2016

DAS 21 9-89

AUG 31 2016

DQA: _____ Date: _____

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

August 09, 2016 3:08:15 PM

Page 1

Work Order ID: 149903

149903

Parent Item: D119-646-241

D119-646-241

Parent Item Name: Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH

Start Date: 8/9/2016

Required Date: 8/31/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP RevA: New issue DD verified by:EC IPP REVB
12.11.05 (DEOD3887-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20
per chg003 ECN13-534 DD verf:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D119-646-241

Manufactured No

Each 0.0000

1

D119-646-241

Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH

**

U

118472

List Lots

Page 1 of 1

Monday, August 08, 2016 12:43:49 PM

Criteria : Item ID: d119-646-241 All Locations All Warehouses All Quantity

Item ID Item Name	Warehouse ID Location ID	Lot Number	Last Trans Date	Lot Qty	Shelf Life Dt Lot Code	Type Code	Comments
D119-646-241 Replacement Skidtube with Run-on Landing Wearplates, Fits LH or RH	Main Warehouse FG084	118472	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118477	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118478	6/23/2015	1.0000	QC21	CHG003	
	Main Warehouse FG084	118479	6/23/2015	1.0000	QC21	CHG003	
Total:				4.0000			

Rework 149896~ 118479 New red labels
 149899. 118478 Pull from stock
 149902-118 477 Mask area according to diagram
 149903 118 472 Remove Paint
 touch up abodine if needed
 clean area
 ✓ if holes were plugged w----
 OC5
 New red labels.

DQA: _____ Date: _____

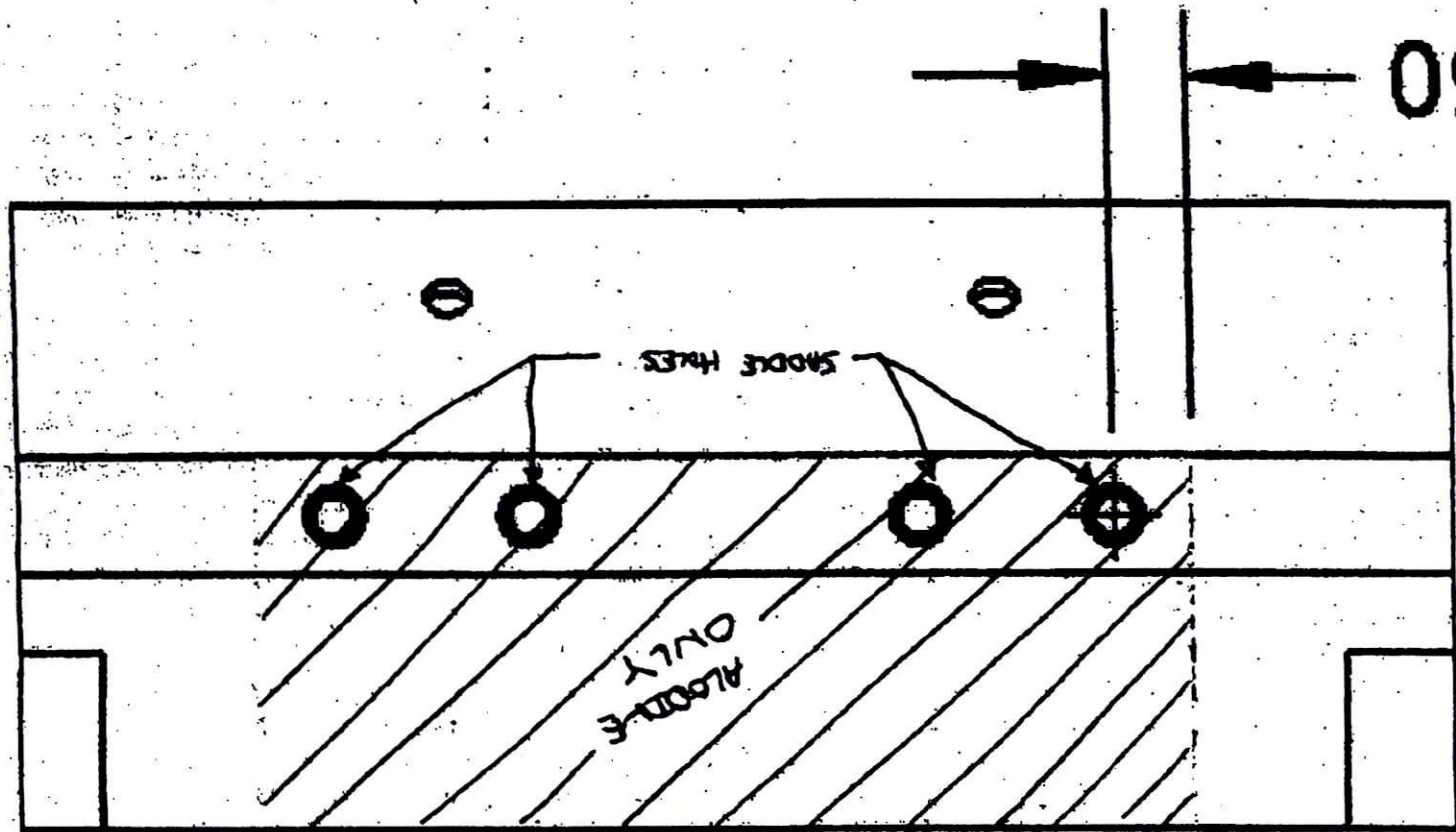
WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					



A.P.
15-05-29

Copy

DQA: Just Date: 09/22/2016

Copy

QA Closed: RAH Date: SEP 12 2016

WORK ORDER NON-CONFORMANCE / UPDATE



Work Order update only ☒

Work Order: 147829

Part No: D119-646-041

NCR No.

DISPOSITION

Rework ☒
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐
Machining ☐
Thermoforming ☐
Large Fab ☐
Cross tube ☐
Small Fab ☐
Finishing ☐
Composite ☐
Water Jet ☐
Prod. Eng. Coord. ☐
Rec/Store/Packaging ☐
Supplier ☐
Engineering ☒
Quality ☐
Other ☐

Date: 16/5/16

Step #: 200

QTY Effective: 1

Description Work Order Deviation

No powder coat on saddle region per customer request.

Disposition

Acceptable per attached masking instructions

MRB (QSI042) Approval

DAS
12 16/6/17

Completed By

16/08/15 DAS
15

Lead hand / Supervisor
Approval Verification

DAS
9
9-89 16-08-03

QA Coordinator
Approval

9-89 16-08-03

Root Cause

Environment ☐
Design ☒
Doc/Data ☐
Equip/Tooling ☐
Handling/Pre ☐
Material ☐
Internal Transport ☐
Tribal Knowledge ☐
LOA ☐
Substation ☐
Past Expiry Date ☐
Misidentified ☐
No Re-verification ☐
Operator ☐
Offset/Setup ☐
Supplier ☐
Training ☐
Use for Testing ☐
Poor Information ☐
Rushing ☐
Product Improvement ☐
Process Improvement ☐
Manufacturing Process ☐
Past Due ☐

Pressure/Forced ☐
Bending ☐
Centre Not Concentric ☐
Cracks ☐
Crimp/Kink/Ripple/Wave ☐
Cuffs ☐
Crushing ☐
Heat Treat ☐
Wave/Twist in Tube ☐
Marks/Chatter ☐

FAULT CATEGORY

Temperature/Cure ☐
Set-up ☐
BOM/Route ☐
Broken/Damage/Defect ☐
Inspection Incomplete/Unqualified ☐
Contamination ☐
Countersink ☐
Cut Too Short ☐
Instructions Incomplete/Unclear ☐
Drill Holes ☐
Power Loss/Surge ☐
Folio/Program ☐
Grain ☐
Weld ☐
Wrong Stock Pulled ☐
Out of Sequence ☐
Off-set ☐
Mislabeled ☐
Fit/Function ☐
Misaligned/off center ☐
Positioned Wrong ☐
Outside Dimensions ☐
Over/Under tolerance ☐
Part Incorrect ☐
Part Lost/Missing ☐
Part Moved ☐
Drawing ☐
Finish ☒
Misread ☐
Turning Sequence ☐

☒ OTHER: Customer

Shirley Hay

From: Sosnovsky Jake <jake.sosnovsky@leonardocompany.com>
Sent: August 18, 2016 9:32 AM
To: Caitlin Crooks
Subject: RE: August 2016 DART POBM

Caitlin,

Please ship them undrilled.

Thanks,
Jake Sosnovsky

From: Caitlin Crooks [mailto:ccrooks@dartaero.com]
Sent: Thursday, August 18, 2016 9:17 AM
To: Sosnovsky Jake
Subject: FW: August 2016 DART POBM

Hi Jake,

Just following up to see if your team had a chance to review my highlighted request below.

Please let me know.

Thank you,
Caitlin Crooks

DART AEROSPACE
T 1 613 632-3336 > 289
E ccrooks@dartaero.com
Toll Free: 1-800-556-4166
www.dartaerospace.com



From: Caitlin Crooks
Sent: Monday, August 15, 2016 11:47 AM
To: 'Sosnovsky Jake' <jake.sosnovsky@leonardocompany.com>
Subject: FW: August 2016 DART POBM

Good Morning Jake,

Please see the below. As discussed on the phone last week, we are currently at our capacity for each month until December and certain months we will be exceeding capacity with 5 per month. Below is a capture of how many landing gears we are manufacturing each month to meet your delivery dates.

SEPT	5
OCT	4
NOV	4 + 1 (possibly, RFQ from Anita last week)
DEC	2